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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,127	07/31/2003	Martin Wildeman	TIE-007-1	2465

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EXAMINER

MATZEK, MATTHEW D

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 03/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/631,127

Applicant(s)

WILDEMAN, MARTIN

Examiner

Matthew D. Matzek

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 21-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date All.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-20, drawn to a coated textile substrate, classified in class 442, subclass 59.
- II. Claims 21-25, drawn to a process for recycling a coated textile substrate, classified in class 427, subclass 288.
- III. Claim 26, drawn to an apparatus for making a textile substrate, classified in class 57, subclass 7.

The inventions are distinct, each from the other because of the following reasons:

1. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the recycled fibers of Invention II could be coated with a thermoplastic coating prior to being formed into a base textile layer of polymeric fiber. This constitutes a materially different process.
2. Inventions III and I are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case the apparatus used to make the

coated textile substrate of Invention I may be a continuous line system that contains a selectively activated hot press rather than a substantially circular rotatable worktop.

3. Inventions II and III are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the article of Invention I may be constructed by hand, as an iron may be used to melt the thermoplastic following its application to the textile substrate. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with James Robertson on 3/8/2005 a provisional election was made with traverse to prosecute the invention of a coated textile substrate, claims 1-20. Affirmation of this election must be made by applicant in replying to this Office action. Claims 21-26 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 102/103***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, 5, 7-9, and 12-18 are rejected under 35 U.S.C. 102(b) as being anticipated by or in alternative, obvious over Jayne et al. (US Patent 3,702,260).

6. Jayne et al. disclose a polyester fiberfill coated with a co-polyester comprising about 20 to 95 percent by weight of polyoxyalkylene units and about 5 to 80 percent by weight of ester units identical to those present in the polyester staple fiber substrate (Abstract). Useful co-polyesters for the purposes of the applied invention may be prepared by esterification or transesterification of appropriate polyoxyalkylene glycols, e.g. having a molecular weight from about 300 to 15,000, with appropriate dicarboxylic acids and/or their diesters, such as terephthalic or isophthalic acids (col. 3, lines 50-55). It is reasonable to presume that the coating and the fibers of the applied invention have substantially equivalent molecular weights as the polyester fibers and the ester component of the co-polyester are identical in composition and the ester may consist of up to 80 weight percent of the coating. It is preferable that a co-polyester

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with an intrinsic viscosity of about 0.7 be used to coat the fiberfill substrate (col. 5, lines 40-45). The applied art does not disclose the glass transition or melting point temperatures for its polyester coatings or fabrics. It is reasonable to presume that the co-polymer coating of the prior art is characterized by a melting point in the range of about 155 °C to about 230 °C and has a glass transition temperature below that of the polyester fibers because it meets the compositional limitations set forth in the instant claims.

***Claim Rejections - 35 USC § 103***

7. Claims 2, 4, and 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Jayne et al. in view of Dutta et al. (US Patent 5,529,830). The invention of Jayne et al. has been previously disclosed.

8. Dutta et al. disclose a layered fabric laminate which is air permeable and waterproof, while being permeable to water vapor (Abstract). The applied invention may be a form-fitting sock insert, sock, hose, stocking, sleeve, hat, glove insert, glove or mitten (col. 3, lines 43-45). The invention of Dutta et al. calls for the application of a discontinuous pattern of an adhesive to a fabric (col. 4, lines 35-40). Suitable fabrics for the present invention include woven, nonwoven or knitted fabrics and may be made of polyester (col. 10, lines 40-45). The application of adhesive in a discontinuous pattern allows for the article to remain air and water vapor permeable.

9. One of ordinary skill in the art at the time of the invention of Jayne et al. would have been motivated to use the discontinuous pattern of Dutta et al. in the invention of Jayne et al. The skilled artisan would have been motivated by the desire to allow the article of Jayne et al. to remain air and water vapor permeable.

***Claim Rejections - 35 USC § 103***

10. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoh et al. in view of Gallagher et al and in further view of Dutta et al. The invention of Dutta et al. has been previously disclosed.

11. Hoh et al. disclose a thermoplastic adhesive and coating composition comprising about 1 to 99 weight percent co-polyester elastomer (Abstract). The co-polyester is most preferably a mixture of terephthalic and isophthalic acids (col. 3, lines 19-25). The coating of the applied invention may be used to coat fabrics and has good wetting and penetration ability into woven and nonwoven fabrics resulting in high mechanical adhesion (col. 13, lines 43-55). The intrinsic viscosity of the Hoh et al. invention has not been disclosed, however as the disclosed coating meets the compositional limitations set forth in the instant claim from which claims 7, 8, 12, 13, 14, and 17 depend it is reasonable to presume that the invention of Hoh et al. meets the instantly claimed limitations. It is reasonable to presume that the co-polymer coating of the prior art is characterized by a melting point in the range of about 155 °C to about 230 °C and has a glass transition temperature below that of the polyester fibers because it meets the compositional limitations set forth in the instant claims.

12. Hoh et al. fail to teach the instantly claimed concentration of isophthalic acid polyester polymer, but claims 11 and 20 are rejected as it is held that concentration limitations are obvious absent a showing of criticality. *Akzo v. E.I. du Pont de Nemours* 1 USPQ 2d 1704 (Fed. Cir. 1987).

13. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have discovered the optimum or workable ranges of concentration limitations

(including those of claims 11 and 20) in Hoh et al. by routine experimentation in the absence of a showing of criticality.

14. Example 35 teaches the application of the applied invention to a woven polyester braid. The applied patent discloses the application of its invention to fabrics, in particular, a polyester fabric, but is silent as to the compositional nature of said fabrics.

15. Gallagher et al. provide novel co-polyesters, fibers, films, and nonwovens from the fibers and disposable products of said co-polyesters (Abstract). The applied patent includes an embodiment that comprises a nonwoven sheet of the disclosed polyester fibers and a water impermeable film of the polyester (col. 3, lines 50-52). A preferred co-polyester of the invention comprises terephthalic and isophthalic acid polyesters (col. 3, line 67-col. 4, line 5). Example 1 uses a co-polyester of terephthalic and isophthalic acid polyesters and has an intrinsic viscosity of 0.87 (col. 14, lines 35-40).

16. It would have been obvious to one of ordinary skill in the art at the time of the invention to have made the polyester fabric of Hoh et al. with composition disclosed in Gallagher et al. The skilled artisan would have been motivated by the fact both of the applied patents call for the use of polyester fabrics.

17. One of ordinary skill in the art at the time of the invention of Hoh et al. would have been motivated to use the discontinuous pattern of Dutta et al. in the invention of Hoh et al. The skilled artisan would have been motivated by the desire to allow the article of Hoh et al. to remain air and water vapor permeable.



***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Matzek whose telephone number is (571) 272-2423. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mdm

*Elizabeth M. Doll*  
ELIZABETH M. DOLL  
PRIMARY EXAMINER